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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,357	03/12/2004	Phillip Burwell	CHEN0189	6340

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EXAMINER

JOHNSON III, HENRY M

ART UNIT PAPER NUMBER

3739

DATE MAILED: 11/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/799,357

Applicant(s)

BURWELL ET AL.

Examiner

Henry M. Johnson, III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) 3,9-29,34,35,38,39,42,44 and 46-58 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-8,30-33,36,37,40 and 41 is/are rejected.
- 7) ☒ Claim(s) 43 and 45 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 060904 120404 110205.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Group I, Species 1 in the reply filed on October 3, 2006 is acknowledged.

Claims 3, 9-29, 34, 35, 38, 39, 42, 44 and 46-58 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim.

Claim Objections

Claim 8 is objected to because of the following informalities: a space is needed between plurality and or in line 2. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2 and 4-8 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,445,608 to Chen et al. Chen et al. disclose a multi-lumen flexible catheter (Fig. 12a, # 176), which incorporates a plurality of high numerical aperture plastic or glass optical fibers (Fig. 12B, #180) clustered around an open central lumen (Col. 19, lines 30-32). The flexible catheter is connected to an external source of light produced, for example, by an array of LEDs or laser diodes (Col. 19, lines 44-46). A light distribution tip (Fig. 12A, # 178) provides an even distribution of light emitted by implantable probe, by diffusing the light emitted from the distal ends of optical fibers. Each optical fiber is adhesively bonded or heat-fused into light distribution tip. The outer surface of the distal ends of optical fibers is textured to provide

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uniform light distribution and coupling into the light distribution tip (Col. 19, lines 55-59). The combination of the fiber ends and distribution tip is interpreted as a diffusing element, and since there are multiple fibers, these are interpreted as multiple diffusing elements. Clearly, one end of the fiber connects to the source and the other (distal) to the diffusing element. The fiber optical may also be interpreted as an optical element. The fiber optics may be a bundle (Fig. 14). A light source for coupling to the fibers is disclosed as an array of LEDs (Fig. 14) on a substrate (inherently having traces) and having a proximal and distal portion. The end connected to the fibers is interpreted as the distal end. Connection to an power source is inherent for operation.

Claims 30-33, 36, 37 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,800,478 to Chen et al. Chen et al. disclose a flexible light probe (Fig. 14, # 158) in a urinary catheter (Fig. 14, # 150) that includes a central lumen and a light guide lumen. Guide lumen (Fig. 14, # 154) guides a bundle of flexible probes 158 that are inserted into the guide lumen from its proximal end and extend just past the distal end of urinary catheter (Col. 11, lines 16-20). Light sources within each of flexible probes provide PDT therapy (Col. 11, lines 55-56). The light sources are disclosed as LEDs (Fig. 1, # 104). The multiple probes are shown in a radial configuration (Fig. 14, # 158). The LEDs within the probe may have different wavelengths (Col. 17, line 39). Chen et al. teaches sensors within the flexible probes to determine the efficacy of the PDT treatment (Col. 2, line 46).

Regarding claim 40, the probes are disclosed as having a linear array, some of which are clearly more distal to the end of the catheter. During examination, claim limitations are to be given their broadest reasonable reading. In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989); In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. 478 as applied to claim 30 above and further in view of Chen et al. 608. Both have been previously discussed. The diffusing of light in PDT is well known and pervasive. It would have been obvious to one skilled in the art to use the diffusing as taught by Chen et al. 608 in the invention of Chen et al. 478 as the use of diffusing element is well known and pervasive in photodynamic therapy treatments.

Allowable Subject Matter

Claims 43 and 45 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 6,749,623 teaches a catheter with LED sources in a radial array and sensing means for PDT.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry M. Johnson, III whose telephone number is (571) 272-4768. The examiner can normally be reached on Monday through Friday from 6:00 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Henry M. Johnson, III
Primary Examiner
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